

### AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application:

Listing of Claims showing current claim amendments:

1. (Currently Amended) A method of inducing apoptosis in mammalian cells expressing Apo-2 receptor comprising exposing mammalian cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody, wherein said antibody stimulates apoptosis in said mammalian cells upon its binding to said Apo-2 receptor, and wherein said antibody binds to an Apo-2 receptor polypeptide having at least about 80% sequence identity to SEQ ID NO:1.
2. (Original) The method of claim 1 wherein said Apo-2 agonist antibody is a monoclonal antibody.
3. (Original) The method of claim 1 wherein said agonist antibody is a chimeric antibody.
4. (Original) The method of claim 1 wherein said agonist antibody is a humanized antibody.
5. (Original) The method of claim 1 wherein said agonist antibody is a human antibody.
- 6 to 9 (Canceled)
10. (Currently amended) A method of treating cancer, comprising exposing mammalian cancer cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody, wherein said antibody stimulates apoptosis in said cells upon its binding to said Apo-2 receptor, and wherein said antibody binds to an Apo-2 receptor polypeptide having at least about 80% sequence identity to SEQ ID NO:1.
11. (Original) The method of claim 10, wherein said cancer cells are lung cancer cells.
12. (Original) The method of claim 10, wherein said cancer cells are colon cancer cells.
13. (Original) The method of claim 10, wherein said cancer cells are glioma cells.

14. (Previously presented) A method of inducing apoptosis in mammalian cells expressing Apo-2 receptor comprising exposing mammalian cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody which (a) binds to Apo-2 polypeptide consisting of the contiguous amino acid residues 1 to 411 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell *in vivo* or *ex vivo*.
15. (Previously presented) The method of claim 14 wherein said Apo-2 agonist antibody is a monoclonal antibody.
16. (Previously presented) The method of claim 14 wherein said agonist antibody is a chimeric antibody.
17. (Previously presented) The method of claim 14 wherein said agonist antibody is a humanized antibody.
18. (Previously presented) The method of claim 14 wherein said agonist antibody is a human antibody.
19. (Previously presented) The method of claim 14 wherein said mammalian cells expressing Apo-2 receptor are cancer cells.
20. (Previously presented) The method of claim 19 wherein said cancer cells are lung cancer cells.
21. (Previously presented) The method of claim 19 wherein said cancer cells are colon cancer cells.
22. (Previously presented) The method of claim 19 wherein said cancer cells are glioma cells.
23. (Previously presented) A method of inducing apoptosis in mammalian cells expressing Apo-2 receptor comprising exposing mammalian cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide which consists of amino acid residues 54 to

182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell *in vivo* or *ex vivo*.

24. (Previously presented) The method of claim 23 wherein said Apo-2 agonist antibody is a monoclonal antibody.
25. (Previously presented) The method of claim 23 wherein said agonist antibody is a chimeric antibody.
26. (Previously presented) The method of claim 23 wherein said agonist antibody is a humanized antibody.
27. (Previously presented) The method of claim 23 wherein said agonist antibody is a human antibody.
28. (Previously presented) The method of claim 23 wherein said mammalian cells expressing Apo-2 receptor are cancer cells.
29. (Previously presented) The method of claim 28 wherein said cancer cells are lung cancer cells.
30. (Previously presented) The method of claim 28 wherein said cancer cells are colon cancer cells.
31. (Previously presented) The method of claim 28 wherein said cancer cells are glioma cells.
32. (Previously presented) A method of treating cancer, comprising exposing mammalian cancer cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody which (a) binds to Apo-2 polypeptide consisting of the contiguous amino acid residues 1 to 411 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cancer cell *in vivo* or *ex vivo*.
33. (Previously presented) The method of claim 32 wherein said Apo-2 agonist antibody is a monoclonal antibody.

34. (Previously presented) The method of claim 32 wherein said agonist antibody is a chimeric antibody.
35. (Previously presented) The method of claim 32 wherein said agonist antibody is a humanized antibody.
36. (Previously presented) The method of claim 32 wherein said agonist antibody is a human antibody.
37. (Previously presented) The method of claim 32 wherein said mammalian cancer cells are lung cancer cells.
38. (Previously presented) The method of claim 32 wherein said mammalian cancer cells are colon cancer cells.
39. (Previously presented) The method of claim 32 wherein said mammalian cancer cells are glioma cells.
40. (Previously presented) A method of treating cancer, comprising exposing mammalian cancer cells expressing Apo-2 receptor to an effective amount of an Apo-2 agonist antibody which (a) binds to a soluble extracellular domain sequence of an Apo-2 polypeptide which consists of amino acid residues 54 to 182 of SEQ ID NO:1 and (b) stimulates apoptosis in at least one type of mammalian cell *in vivo* or *ex vivo*.
41. (Previously presented) The method of claim 40 wherein said Apo-2 agonist antibody is a monoclonal antibody.
42. (Previously presented) The method of claim 40 wherein said agonist antibody is a chimeric antibody.
43. (Previously presented) The method of claim 40 wherein said agonist antibody is a humanized antibody.
44. (Previously presented) The method of claim 40 wherein said agonist antibody is a human antibody.

45. (Previously presented) The method of claim 40 wherein said mammalian cancer cells are lung cancer cells.
46. (Previously presented) The method of claim 40 wherein said mammalian cancer cells are colon cancer cells.
47. (Previously presented) The method of claim 40 wherein said mammalian cancer cells are glioma cells.
48. (New) The method of claim 1 wherein said Apo-2 receptor polypeptide has at least about 85% sequence identity to SEQ ID NO:1
49. (New) The method of claim 1 wherein said Apo-2 receptor polypeptide has at least about 90% sequence identity to SEQ ID NO:1
50. (New) The method of claim 1 wherein said Apo-2 receptor polypeptide has at least about 95% sequence identity to SEQ ID NO:1
51. (New) The method of claim 10 wherein said Apo-2 receptor polypeptide has at least about 85% sequence identity to SEQ ID NO:1
52. (New) The method of claim 10 wherein said Apo-2 receptor polypeptide has at least about 90% sequence identity to SEQ ID NO:1
53. (New) The method of claim 10 wherein said Apo-2 receptor polypeptide has at least about 95% sequence identity to SEQ ID NO:1